

C1
cont
b1
cont

transmission of vertical and/or lateral vibration between the payload and the base structure are suppressed.

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9C6

and

27. (Amended) A motion constraint mechanism comprising:
a first mechanical linkage disposed between a payload and a base structure;
at least a second mechanical linkage arranged relative to the first mechanical linkage such that the first and at least second mechanical linkages maintain a parallel relationship between the payload and the base structure throughout a range of motion.

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9C6

36. (Twice Amended) A method of constraining motion between a payload and a base structure, the method comprising the steps of:
providing a first mechanical linkage disposed between the payload and the base structure;
providing at least a second mechanical linkage disposed between the payload and the base structure; and
arranging the first and at least second mechanical linkages relative to each other such that the first and at least second mechanical linkages maintain a parallel relationship between the payload and the base structure throughout a range of motion.

b4

39. (Twice Amended) A support apparatus for providing vertical and/or lateral support of a payload relative to the base structure such that the transmission of vertical and/or lateral vibration between the payload and the base structure are suppressed, the support apparatus comprising:

b4
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a deformable member exhibiting nonlinear elastic characteristics in response to an effective payload weight;

support means for supporting the effective payload weight; and

effective payload adjustment means for adjusting the level of support of the support means in response to a varying effective payload weight;

d1
cont

wherein the deformable member comprises a bottom plate fixed to one of the payload or base structure or portions thereof, a top plate movable relative to the bottom plate and fixed to the other of the payload or base structure or portions thereof, the deformable member further comprising a compressible material disposed in a space between the top and bottom plates, the space between the top and bottom plates defining an annular cavity and wherein the compressible material disposed in the space is an elastomeric extruded tubular element, the elastomeric extruded tubular element having a tubular cavity running therein and being coiled within the space in a helical manner to thereby fill the space.

b5

47. (Amended) The support apparatus of claim 46, wherein the support adjustment means comprises a gas source in communication with the tubular cavity wherein the feedback means controls the gas pressure level in the tubular cavity in response to the change in relative distance between the payload and the base structure.

REMARKS

It is respectfully requested that this Preliminary Amendment be entered in the above-identified application prior to examination.

By means of the present Preliminary Amendment, the claims have been amended in view of a Final Official Action issued on March 27, 2002, an Advisory Action